

RAW SEQUENCE LISTING

EFS

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/553,906 D
Source: IFW
Date Processed by STIC: 1/5/07

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 01/05/2007

PATENT APPLICATION: US/10/553,906D

TIME: 14:14:14

Input Set : N:\efs\01_05_07\10553906_efs\ALBI-41348-sequence_ST25.txt

Output Set: N:\CRF4\01052007\J553906D.raw

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3 <110> APPLICANT: Bergman, Tomas
4     Duan, Rui-Dong
5     Nilsson, Ake
7 <120> TITLE OF INVENTION: Human Alkaline Sphingomyelinase and Use Thereof
9 <130> FILE REFERENCE: ALBI 41348
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/553,906D
C--> 12 <141> CURRENT FILING DATE: 2005-10-21
14 <150> PRIOR APPLICATION NUMBER: US 60/320,139
15 <151> PRIOR FILING DATE: 2003-04-24
17 <150> PRIOR APPLICATION NUMBER: US 60/481,598
18 <151> PRIOR FILING DATE: 2003-11-05
20 <160> NUMBER OF SEQ ID NOS: 18
22 <170> SOFTWARE: PatentIn version 3.4
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 458
26 <212> TYPE: PRT
27 <213> ORGANISM: Homo sapiens
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36          20          25          30
39 Leu Leu Leu Val Ser Phe Asp Gly Phe Arg Trp Asn Tyr Asp Gln Asp
40          35          40          45
43 Val Asp Thr Pro Asn Leu Asp Ala Met Ala Arg Asp Gly Val Lys Ala
44          50          55          60
47 Arg Tyr Met Thr Pro Ala Phe Val Thr Met Thr Ser Pro Cys His Phe
48 65          70          75          80
51 Thr Leu Val Thr Gly Lys Tyr Ile Glu Asn His Gly Val Val His Asn
52          85          90          95
55 Met Tyr Tyr Asn Thr Thr Ser Lys Val Lys Leu Pro Tyr His Ala Thr
56          100         105         110
59 Leu Gly Ile Gln Arg Trp Trp Asp Asn Gly Ser Val Pro Ile Trp Ile
60          115         120         125
63 Thr Ala Gln Arg Gln Gly Leu Arg Ala Gly Ser Phe Phe Tyr Pro Gly
64          130         135         140
67 Gly Asn Val Thr Tyr Gln Gly Val Ala Val Thr Arg Ser Arg Lys Glu
68 145         150         155         160
71 Gly Ile Ala His Asn Tyr Lys Asn Glu Thr Glu Trp Arg Ala Asn Ile
72          165         170         175
75 Asp Thr Val Met Ala Trp Phe Thr Glu Glu Asp Leu Asp Leu Val Thr
76          180         185         190
79 Leu Tyr Phe Gly Glu Pro Asp Ser Thr Gly His Arg Tyr Gly Pro Glu

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80          195          200          205
83 Ser Pro Glu Arg Arg Glu Met Val Arg Gln Val Asp Arg Thr Val Gly
84          210          215          220
87 Tyr Leu Arg Glu Ser Ile Ala Arg Asn His Leu Thr Asp Arg Leu Asn
88 225          230          235          240
91 Leu Ile Ile Thr Ser Asp His Gly Met Thr Thr Val Asp Lys Arg Ala
92          245          250          255
95 Gly Asp Leu Val Glu Phe His Lys Phe Pro Asn Phe Thr Phe Arg Asp
96          260          265          270
99 Ile Glu Phe Glu Leu Leu Asp Tyr Gly Pro Asn Gly Met Leu Leu Pro
100          275          280          285
103 Lys Glu Gly Arg Leu Glu Lys Val Tyr Asp Ala Leu Lys Asp Ala His
104          290          295          300
107 Pro Lys Leu His Val Tyr Lys Lys Glu Ala Phe Pro Glu Ala Phe His
108 305          310          315          320
111 Tyr Ala Asn Asn Pro Arg Val Thr Pro Leu Leu Met Tyr Ser Asp Leu
112          325          330          335
115 Gly Tyr Val Ile His Gly Arg Ile Asn Val Gln Phe Asn Asn Gly Glu
116          340          345          350
119 His Gly Phe Asp Asn Lys Asp Met Asp Met Lys Thr Ile Phe Arg Ala
120          355          360          365
123 Val Gly Pro Ser Phe Arg Ala Gly Leu Glu Val Glu Pro Phe Glu Ser
124          370          375          380
127 Val His Val Tyr Glu Leu Met Cys Arg Leu Leu Gly Ile Val Pro Glu
128 385          390          395          400
131 Ala Asn Asp Gly His Leu Ala Thr Leu Leu Pro Met Leu His Thr Glu
132          405          410          415
135 Ser Ala Leu Pro Pro Asp Ala Leu Leu Val Ala Asp Gly Pro Cys Leu
136          420          425          430
139 Pro Ser Leu Ser Gln Ala Lys Gly Cys Met Pro Leu Ser Pro Ala Ala
140          435          440          445
143 Pro Thr Pro Ala Trp Leu Leu Trp Cys Trp
144          450          455

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147 <210> SEQ ID NO: 2

148 <211> LENGTH: 1701

149 <212> TYPE: DNA

150 <213> ORGANISM: Homo sapiens

152 <400> SEQUENCE: 2

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155 cgctcctggc tcccggggcc ggagcaccgg tacaaagtca gggctcccag aacaagctgc      120
157 tcttggtgtc cttcgacggc ttccgctgga actacgacca ggacgtggac accccaacc      180
159 tggacgccat ggcccagac ggggtgaagg cacgctacat gacccccgcc tttgtcacca      240
161 tgaccagccc ctgccacttc accctgggtca ccggcaaata tatcgagaac cacgggggtg      300
163 ttcaacaacat gtactacaac accaccagca aggtgaagct gccctaccac gccacgtgg      360
165 gcatccagag gtggtgggac aacggcagcg tgcccactct gatcacagcc cagaggcagg      420
167 gcctgagggc tggctccttc ttctaccggc gcgggaacgt cacctacca ggggtggctg      480
169 tgacgcggag ccggaaagaa ggcacgcac acaactacaa aaatgagacg gagtggagag      540
171 cgaacatcga cacagtgatg gcgtggttca cagaggagga cctggatctg gtcacactct      600
173 acttcgggga gccggactcc acgggccaca ggtacggccc cgagtccccg gagaggaggg      660

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175 agatggtgcg gcaggtggac cggaccgtgg gctacctccg ggagagcatc gcgcgcaacc 720
177 acctcacaga ccgcctcaac ctgatcatca catccgacca cggcatgacg accgtggaca 780
179 aacgggctgg cgacctggtt gaattccaca agttcccaaa cttcaccttc cgggacatcg 840
181 agtttgagct cctggactac ggaccaaacy ggatgctgct ccctaaagaa gggaggctgg 900
183 agaaggtgta cgatgccctc aaggacgccc accccaagct ccacgtctac aagaaggagg 960
185 cgttccccga ggccttccac tacgccaaca accccagggt cacacccctg ctgatgtaca 1020
187 gcgaccttgg ctacgtcatc catgggagaa ttaacgtcca gttcaacaat ggggagcacg 1080
189 gctttgacaa caaggacatg gacatgaaga ccacttcccg cgctgtgggc cctagcttca 1140
191 gggcgggcct ggagggtggag ccctttgaga gcgtccacgt gtacgagctc atgtgccggc 1200
193 tgctgggcat cgtgcccagag gccaacgatg ggacactagc tactctgctg cccatgctgc 1260
195 acacagaatc tgctcttccg cctgatgctc tgctggctgc ggacggaccc tgctcccca 1320
197 gcttatccca ggcagaggc tgcagccac tgtccccggc agcgccaacc cctgcttggc 1380
199 tgttatggtg ctggtataaa gcctgcagcc caggtccaaa gccccggcg agcgggtccc 1440
201 ataaccggcc cctgcccct gccctgctc ctgctcctcc ccttcgggcc cctcctcct 1500
203 gcaaaacccg ctcccgaagc ggcgctgccg tctgcagcca cgcgggggcg gcggggagtc 1560
205 ttctgcgggc gctggaacct gcagaccggg cctcggtcag ctgggagggg cccgccccgg 1620
207 cacaagcac ccatgggaat aaaggccaag ccgcgacagt cagcaaaaaa aaaaaaaaaa 1680
209 aaaaaaaaaa aaaaaaaaaa a
1701

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212 <210> SEQ ID NO: 3

213 <211> LENGTH: 18

214 <212> TYPE: PRT

215 <213> ORGANISM: Homo sapiens

217 <400> SEQUENCE: 3

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220 1 5 10 15

223 Lys Tyr

227 <210> SEQ ID NO: 4

228 <211> LENGTH: 458

229 <212> TYPE: PRT

230 <213> ORGANISM: Homo sapiens

232 <400> SEQUENCE: 4

234 Met Arg Gly Pro Ala Val Leu Leu Thr Val Ala Leu Ala Thr Leu Leu

235 1 5 10 15

238 Ala Pro Gly Ala Gly Ala Pro Val Gln Ser Gln Gly Ser Gln Asn Lys

239 20 25 30

242 Leu Leu Leu Val Ser Phe Asp Gly Phe Arg Trp Asn Tyr Asp Gln Asp

243 35 40 45

246 Val Asp Thr Pro Asn Leu Asp Ala Met Ala Arg Asp Gly Val Lys Ala

247 50 55 60

250 Arg Tyr Met Thr Pro Ala Phe Val Thr Met Thr Ser Pro Cys His Phe

251 65 70 75 80

254 Thr Leu Val Thr Gly Lys Tyr Ile Glu Asn His Gly Val Val His Asn

255 85 90 95

258 Met Tyr Tyr Asn Thr Thr Ser Lys Val Lys Leu Pro Tyr His Ala Thr

259 100 105 110

262 Leu Gly Ile Gln Arg Trp Trp Asp Asn Gly Ser Val Pro Ile Trp Ile

263 115 120 125

266 Thr Ala Gln Arg Gln Gly Leu Arg Ala Gly Ser Phe Phe Tyr Pro Gly

267 130 135 140

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Output Set: N:\CRF4\01052007\J553906D.raw

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270 Gly Asn Val Thr Tyr Gln Gly Val Ala Val Thr Arg Ser Arg Lys Glu
271 145 150 155 160
274 Gly Ile Ala His Asn Tyr Lys Asn Glu Thr Glu Trp Arg Ala Asn Ile
275 165 170 175
278 Asp Thr Val Met Ala Trp Phe Thr Glu Glu Asp Leu Asp Leu Val Thr
279 180 185 190
282 Leu Tyr Phe Gly Glu Pro Asp Ser Thr Gly His Arg Tyr Gly Pro Glu
283 195 200 205
286 Ser Pro Glu Arg Arg Glu Met Val Arg Gln Val Asp Arg Thr Val Gly
287 210 215 220
290 Tyr Leu Arg Glu Ser Ile Ala Arg Asn His Leu Thr Asp Arg Leu Asn
291 225 230 235 240
294 Leu Ile Ile Thr Ser Asp His Gly Met Thr Thr Val Asp Lys Arg Ala
295 245 250 255
298 Gly Asp Leu Val Glu Phe His Lys Phe Pro Asn Phe Thr Phe Arg Asp
299 260 265 270
302 Ile Glu Phe Glu Leu Leu Asp Tyr Gly Pro Asn Gly Met Leu Leu Pro
303 275 280 285
306 Lys Glu Gly Arg Leu Glu Lys Val Tyr Asp Ala Leu Lys Asp Ala His
307 290 295 300
310 Pro Lys Leu His Val Tyr Lys Lys Glu Ala Phe Pro Glu Ala Phe His
311 305 310 315 320
314 Tyr Ala Asn Asn Pro Arg Val Thr Pro Leu Leu Met Tyr Ser Asp Leu
315 325 330 335
318 Gly Tyr Val Ile His Gly Arg Ile Asn Val Gln Phe Asn Asn Gly Glu
319 340 345 350
322 His Gly Phe Asp Asn Lys Asp Met Asp Met Lys Thr Ile Phe Arg Ala
323 355 360 365
326 Val Gly Pro Ser Phe Arg Ala Gly Leu Glu Val Glu Pro Phe Glu Ser
327 370 375 380
330 Val His Val Tyr Glu Leu Met Cys Arg Leu Leu Gly Ile Val Pro Glu
331 385 390 395 400
334 Ala Asn Asp Gly His Leu Ala Thr Leu Leu Pro Met Leu His Thr Glu
335 405 410 415
338 Ser Ala Leu Pro Pro Asp Gly Arg Pro Thr Leu Leu Pro Lys Gly Arg
339 420 425 430
342 Ser Ala Leu Pro Pro Ser Ser Arg Pro Leu Leu Val Met Gly Leu Leu
343 435 440 445
346 Gly Thr Val Ile Leu Leu Ser Glu Val Ala
347 450 455
350 <210> SEQ ID NO: 5
351 <211> LENGTH: 1878
352 <212> TYPE: DNA
353 <213> ORGANISM: Homo sapiens
356 <220> FEATURE:
357 <221> NAME/KEY: misc_feature
358 <222> LOCATION: (905)..(905)
359 <223> OTHER INFORMATION: n is a, c, g, or t
361 <400> SEQUENCE: 5

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DATE: 01/05/2007

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Input Set : N:\efs\01_05_07\10553906_efs\ALBI-41348-sequence_ST25.txt

Output Set: N:\CRF4\01052007\J553906D.raw

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362 gtccatctgg aagggccagc atgagaggcc cggccgtcct cctcactgtg gctctggcca      60
364 cgctcctggc tcccggggcc ggagcaccgg tacaaagtca gggctcccag aacaagctgc      120
366 tcctggtgtc cttcgacggc ttccgctgga actacgacca ggacgtggac accccaacc      180
368 tggacgcat ggcccagagc ggggtgaagg cacgctacat gacccccgcc tttgtcacca      240
370 tgaccagccc ctgccacttc accctgggtca ccggcaaata tatcgagaac cacgggggtg      300
372 ttcacaacat gtactacaac accaccagca aggtgaagct gccctaccac gccacgctgg      360
374 gcatccagag gtggtgggac aacggcagcg tgcccactct gatcacagcc cagaggcagg      420
376 gcctgagggc tggctccttc ttctacccgg gcgggaacgt cacctacca ggggtggctg      480
378 tgacgcggag ccggaaaagaa ggcatcgcac acaactacaa aaatgagacg gagtggagag      540
380 cgaacatcga cacagtgatg gcgtggttca cagaggagga cctggatctg gtcacactct      600
382 acttcgggga gccggactcc acgggccaca ggtacggccc cgagtccccg gagaggagg      660
384 agatggtgcg gcaggtggac cggaccgtgg gctacctccg ggagagcatc gcgcgcaacc      720
386 acctcacaga ccgcctcaac ctgatcatca catccgacca cggcatgacg accgtggaca      780
388 aacgggctgg cgacctggtt gaattccaca agttcccaaa cttcaccttc cgggacatcg      840
390 agtttgagct cctggactac ggaccaaacy ggatgctgct ccctaaagaa gggaggctgg      900
W--> 392 agaangtgta cgatgccctc aaggacgccc accccaagct ccacgtctac aagaaggagg      960
394 cgttccccga ggccttcac tacgccaaca accccagggt cacaccctg ctgatgtaca      1020
396 gcgaccttgg ctacgtcatc catgggagaa ttaacgtcca gttcaacaat ggggagcacg      1080
398 gctttgacaa caaggacatg gacatgaaga ccatcttccg cgctgtgggc cctagcttca      1140
400 gggcgggcct ggaggtggag ccctttgaga gcgtccacgt gtacgagctc atgtgccggc      1200
402 tgctgggcat cgtgcccag gccaacgatg ggcacctagc tactctgctg cccatgctgc      1260
404 acacagaatc tgctcttccg cctgatggaa ggcctactct cctgcccagg ggaagatctg      1320
406 ctctcccgcc cagcagcagg cccctcctcg tgatgggact gctggggacc gtgattcttc      1380
408 tgtctgaggt cgcataacgc cccatggctc aaggaagccg ccgggagctg cccgcaggcc      1440
410 ctgggcccgc tgtctcgctg cgatgctctg ctggtcgcgg acggaccctg cctccccagc      1500
412 ttatcccagg ccagaggctg catgccactg tccccggcag cgccaacccc tgcttggtg      1560
414 ttatggtgct ggtaataagc ctgcagccc aggtccagag cccccggcga gccggtccca      1620
416 taaccggccc cctgcccctg cccctgctcc tgctcctccc cttcggggcc cctcctcctg      1680
418 caaaacccgc tcccgaagcg gcgctgccgt ctgcagccac gcgggggccc gcgggagctc      1740
420 tgcgggcgct ggaacctgca gaccggcct cggtcagctg ggagggggcc gccccggcac      1800
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424 aaaaaaaaaa aaaaaaaaaa                                     1878
427 <210> SEQ ID NO: 6
428 <211> LENGTH: 415
429 <212> TYPE: PRT
430 <213> ORGANISM: Homo sapiens
432 <400> SEQUENCE: 6
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438 Ala Pro Gly Ala Gly Ala Pro Val Gln Ser Gln Gly Ser Gln Asn Lys
439 20 25 30
442 Leu Leu Leu Val Ser Phe Asp Gly Phe Arg Trp Asn Tyr Asp Gln Asp
443 35 40 45
446 Val Asp Thr Pro Asn Leu Asp Ala Met Ala Arg Asp Gly Val Lys Ala
447 50 55 60
450 Arg Tyr Met Thr Pro Ala Phe Val Thr Met Thr Ser Pro Cys His Phe
451 65 70 75 80
454 Thr Leu Val Thr Gly Lys Tyr Ile Glu Asn His Gly Val Val His Asn
455 85 90 95

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 905

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:10,11,12,13,14,15,17,18

VERIFICATION SUMMARY

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L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:392 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:900